

TEST REPORT

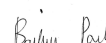
EN 301 489-6 v1.2.1 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 6: Specific conditions for Digital Enhanced Cordless Telecommunications (DECT) equipment

Report Reference No. : 103855TRFEMC

Tested by (name+signature) : G. Curioni



Approved by (name+signature) : P. Barbieri



Date of issue : 2008-03-20

Testing Laboratory : **Nemko Spa**

Address : Via del Carroccio, 4
I-20046 Biassono MI (Italy)

Testing location/ procedure : Full application of Harmonised standards ☒
Partial application of Harmonised standards ☐
Other standard testing methods ☐
Non-standard testing methods ☐
SINAL accredited test report ☐

Testing location/ address : Nemko Spa – Via del Carroccio, 4 - I-20046 Biassono MI (Italy)

Applicant's name : **Suncorp Communications Limited**

Address : **Room 1907-08, 19/F, Harcourt House 39, Wanchai Hong Kong**

Test specification:

Standard : ETSI EN 301 489-1 v.1.6.1 (2005-09)

ETSI EN 301 489-6 v.1.2.1 (2002-08)

Test procedure : NEMKO WML0177 and WML1002

Non-standard test method : N/A

Test Report Form No. : TRF EMC SpA

TRF Originator : Nemko Spa

Master TRF : 2005-06

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Test item description : DECT

Trade Mark : -

Manufacturer : Suncorp

Model/Type reference : DECT79-C01

Ratings : CFP: 230Vac, 50 Hz, 50 mA
CPP: 2 AAA Ni-MH rechargeable battery (1.2 Vdc 550mAh)

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EMC -- T E S T R E P O R T

Test Report No. :	103855TRFEMC	2008-03-20 Date of issue
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Type / Model	:DECT79-C01
Equipment	:The E.U.T. was composed of the following units: - CFP with AC/DC adapter; - CPP.
Applicant	: Suncorp Communications limited
Address	:Room 1907-08, 19/F, Harcourt House 39 Gloucester Road, Wanchai, Honk Kong
Manufacturer	: Suncorp Communications limited
Address	:No 68 Guo Wei Road, Liangteng Industrial district Shenzhen P.R.C.

Test Result according to the standards on page 4:	Positive
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The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1 TEST STANDARDS

The tests were performed according to following standards:

NEMKO WML0177 Use of measuring equipment to perform standards tests

NEMKO WML1002 Measurement Uncertainty - Policy and Statement

ETSI EN301489-1 v1.6.1 (2005-09)

Electromagnetic Compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common Technical Requirements.

ETSI EN301489-6 v1.2.1 (2002-08)

Electromagnetic Compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 6: Specific conditions for Digital Enhanced Telecommunications (DECT) equipment

EN 55022 (1998) + A1 (2000) + A2 (2003)

Information technology equipment – Radio disturbance characteristics - Limits and methods of measurement

EN 61000-3-2 (2000) + A2 (2005)

Electromagnetic compatibility (EMC) - Part 3: Limits - Section 2: Limits for harmonic current emission (equipment input current <16 A per phase).

EN 61000-3-3 (1995) + A1 (2001) + A2 (2005)

Electromagnetic compatibility (EMC) - Part 3: Limits. - Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current <16 A.

EN 61000-4-2 (1995) + A1 (1998) + A2 (2001)

Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 2: Electrostatic discharge immunity test - Basic EMC Publication.

EN 61000-4-3 (2006)

Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 3: Radiated, radio frequency electromagnetic field, immunity test.

EN 61000-4-4 (2004)

Electromagnetic compatibility(EMC) - Part 4: Testing and measurement techniques - Section 4: Electrical fast transient / burst immunity test - Basic EMC publication.

EN 61000-4-5 (2006)

Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 5: Surge immunity test.

EN 61000-4-6 (2007)

Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 6: Conducted disturbances induced by radio-frequency fields- immunity test.

EN 61000-4-11 (2004)

Electromagnetic compatibility (EMC) - Part 4: Testing and measurement techniques - Section 11: Voltage dips, short interruptions and voltage variations immunity tests.

2 SUMMARY

GENERAL REMARKS:

This report is an upgrade of the report 102748TRFEMC. Only radiated EMF immunity test has been performed on the new sample, according to client's request.

FINAL ASSESSMENT:

The EMC requirements pertaining to the technical standards and tested operation modes are

■ - fulfilled.

The equipment under test

■ - fulfils the EMC requirements cited on page 4.

Date of receipt of test sample : 2008-03-03

Testing commenced on : 2008-03-04

Testing concluded on : 2008-03-20

3 EQUIPMENT UNDER TEST

3.1 Power supply system utilised

Power supply voltage:

■ 230V/50 Hz / 1 ϕ	o 115V/60Hz / 1 ϕ
o 400V/50 Hz 3PE	o 400V/50 Hz 3NPE
o 12 V DC	o 24 V DC

3.2 Short description of the Equipment under Test (EuT)

The E.U.T. was a Dect. It was supplied by means of an external AC/DC adapter model ED3514065030P (Input 230Vac, 50Hz, 50mA, Output: 6.5Vdc, 300 mA). The CPP was supplied by means of 2 AAA Ni-MH rechargeable battery 1.2 Vdc, 550mAh.

Number of tested samples: **2 (only radiate EMF immunity test has been performed on the second sample).**
Serial number: HS: 0.3; BU: 0.3 (Hardware)
HS: V79C4; BU: V0218 (Software)

EuT operation mode:

The equipment under test was operated during the measurement under the following conditions:

- - Normal working condition;

Operation mode 1: Recharging mode.

Operation mode 2: Off hook.

EuT configuration:

The following peripheral devices and interface cables were connected during the measurement:

■ Feeding bridge	Model :TEL01
------------------	--------------

The following peripheral devices and interface cables were connected during the measurement:

■ AC Mains	Model :Direct plug in
■ DC power cable (length < 3m)	Model :From AC/DC adapter
■ PSTN cable	Model :Standard with RJ11 connector.

3.3 Performance level

The test results shall be classified in terms of the loss of function or degradation of performance of the equipment under test, relative to a performance level defined by its manufacturer or the requestor of the test, or agreed between the manufacturer and the purchaser of the product.

Definition related to the performance level:

- based on the used product standard
 - o based on the declaration of the manufacturer, requestor or purchaser
-
- No loss of functions or of stored data is allowed (when performance criteria CT/CR and TT/TR are applied);
 - Communication link shall be maintained (when performance criteria CT/CR and TT/TR are applied).
 - No unintentional transmission responses are allowed (when performance criteria CT and TT are applied).
 - Signal to Noise Audio Ratio (S/N) shall be at least 35 dB (when performance criteria CT/CR are applied);

4 TEST ENVIRONMENT

4.1 Address of the test laboratory

Nemko Spa
Via del Carroccio, 4
I-20046 Biassono MI

4.2 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature: 18-27 °C

Humidity: 30-60 %

Atmospheric pressure: 860-1060 hPa

4.3 Definitions of symbols used in this test report

- -The black square indicates that the listed condition, standard or equipment is applicable for this report.
- -The empty circle indicates that the listed condition, standard or equipment is **not** applicable for this report.

4.4 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4 „Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements“ and is documented in the Nemko Technical Procedure WML1002. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Nemko Spa laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	Antenna distance 3m (30÷200) MHz	± 5.2 dB	(1)
	Antenna distance 3m (200÷1000) MHz	± 4.9 dB	(1)
	Antenna distance 10m (30÷200) MHz	± 5.0 dB	(1)
	Antenna distance 10m (200÷1000) MHz	± 4.8 dB	(1)
Conducted Emission	9 kHz ÷ 30 MHz	± 2.8 dB	(1)
Clicks	9 kHz ÷ 30 MHz	± 2.8 dB	(1)
Radiated Power Emission	(30÷300) MHz	± 4.0 dB	(1)
Harmonic Current Emission	50 Hz ÷ 2 kHz	± 2%	(1)
Voltage Fluctuation Emission	--	± 2%	(1)
Radiated Immunity	20 MHz ÷ 2.5 GHz	(0.0 ÷ 6.0) dB	(1)
Conducted RF Immunity	9 kHz ÷ 230 MHz	± 2.0 dB	(1)
ESD Immunity	--	± 6%	(1)
Burst Immunity	--	± 2%	(1)
Surge Immunity	--	± 2%	(1)
Dips Immunity	--	± 2%	(1)
Magnetic Field Immunity	50 Hz	± 2.0dB	(1)
Damped Magnetic Field Immunity	100 kHz, 1 MHz	± 3 dB ampl. ± 10% freq.	(1)
Oscillatory Wave Immunity	100 kHz, 1 MHz	± 20%	(1)
Low Frequency Immunity	15 Hz ÷ 150 kHz	± 2.0 dB	(1)

NOTES:

- (1) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$ which has been derived from the assumed normal probability distribution with infinite degrees of freedom and for a coverage probability of 95 %;

5 TEST CONDITIONS AND RESULTS

5.1 Conducted disturbance on AC mains

For test instruments and accessories used see section 6.

5.1.1 Description of the test location

Test location: Shielded room

5.1.2 Photo documentation of the test set-up



5.1.3 Test result

The requirements are **Fulfilled**

Frequency range: 0.15 MHz - 30 MHz

Min. limit margin None

Remarks: The limits are kept. For detailed results, please see the following page(s).

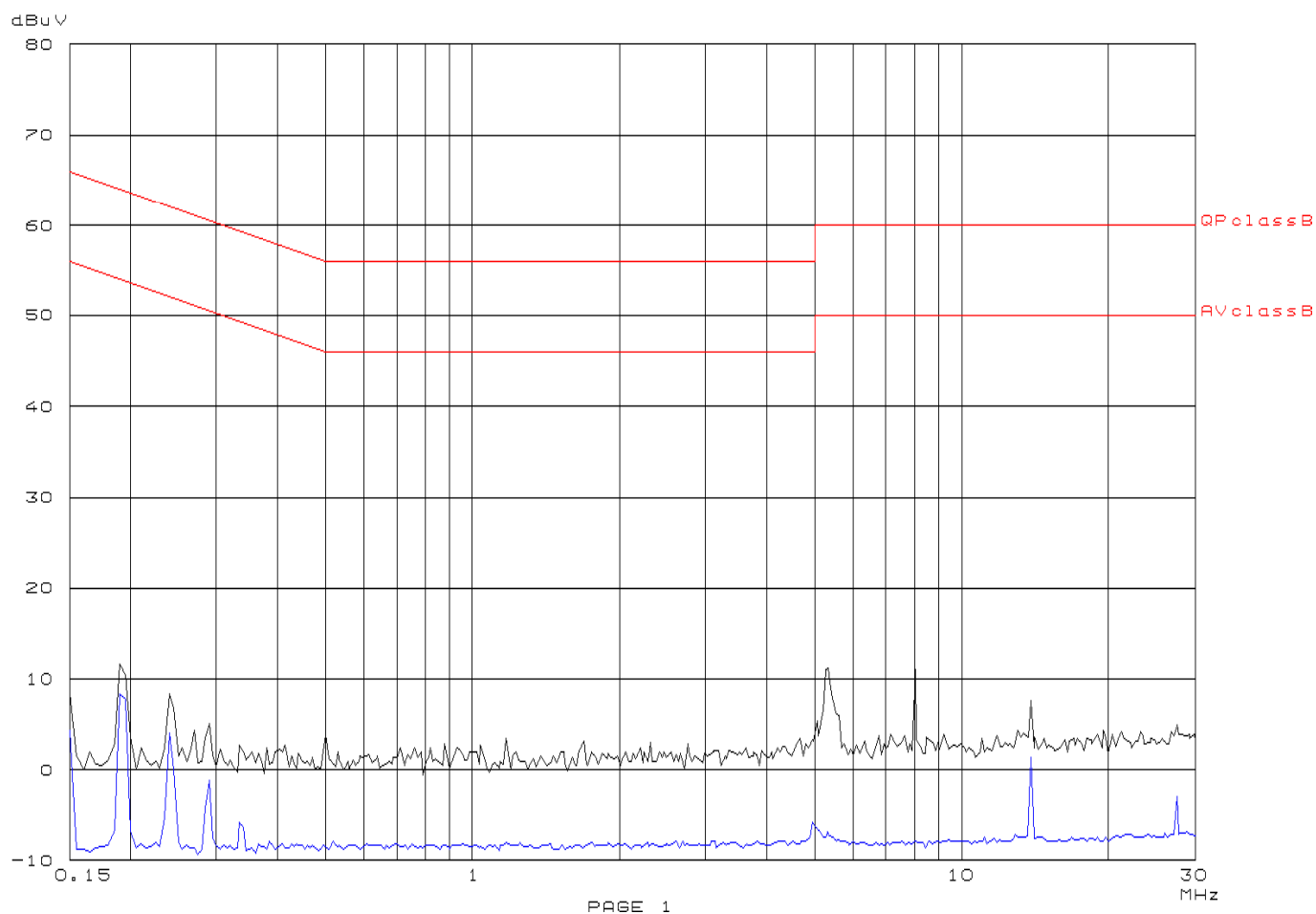
5.1.4 Test protocol

Test point Phase line
Operation mode: Operation mode 1
Remarks: \\\

Result: ■ - passed

NEMKO S.p.A. EMC Lab.
CONDUCTED EMISSIONS AC MAINS

EUT: DECTP9-C01
Manuf: SunoCorp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Phase line
Charging

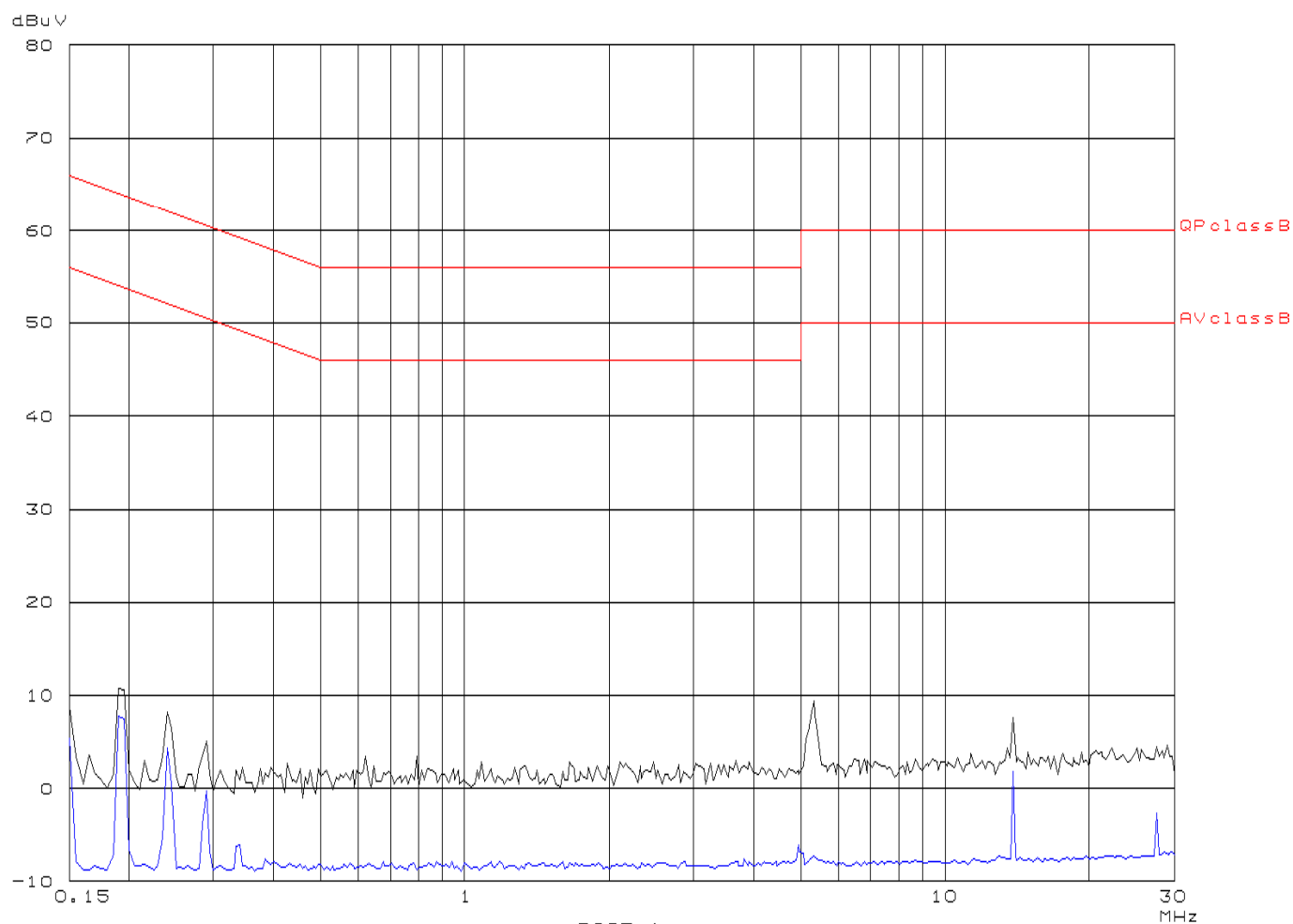


Test point: Neutral line
Operation mode: Operation mode 1
Remarks: \\\

Result: ■ - passed

NEMKO S.p.A. EMC Lab. CONDUCTED EMISSIONS AC MAINS

EUT: DECT79-C01
Manuf: Suncorp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Neutral line
Charging



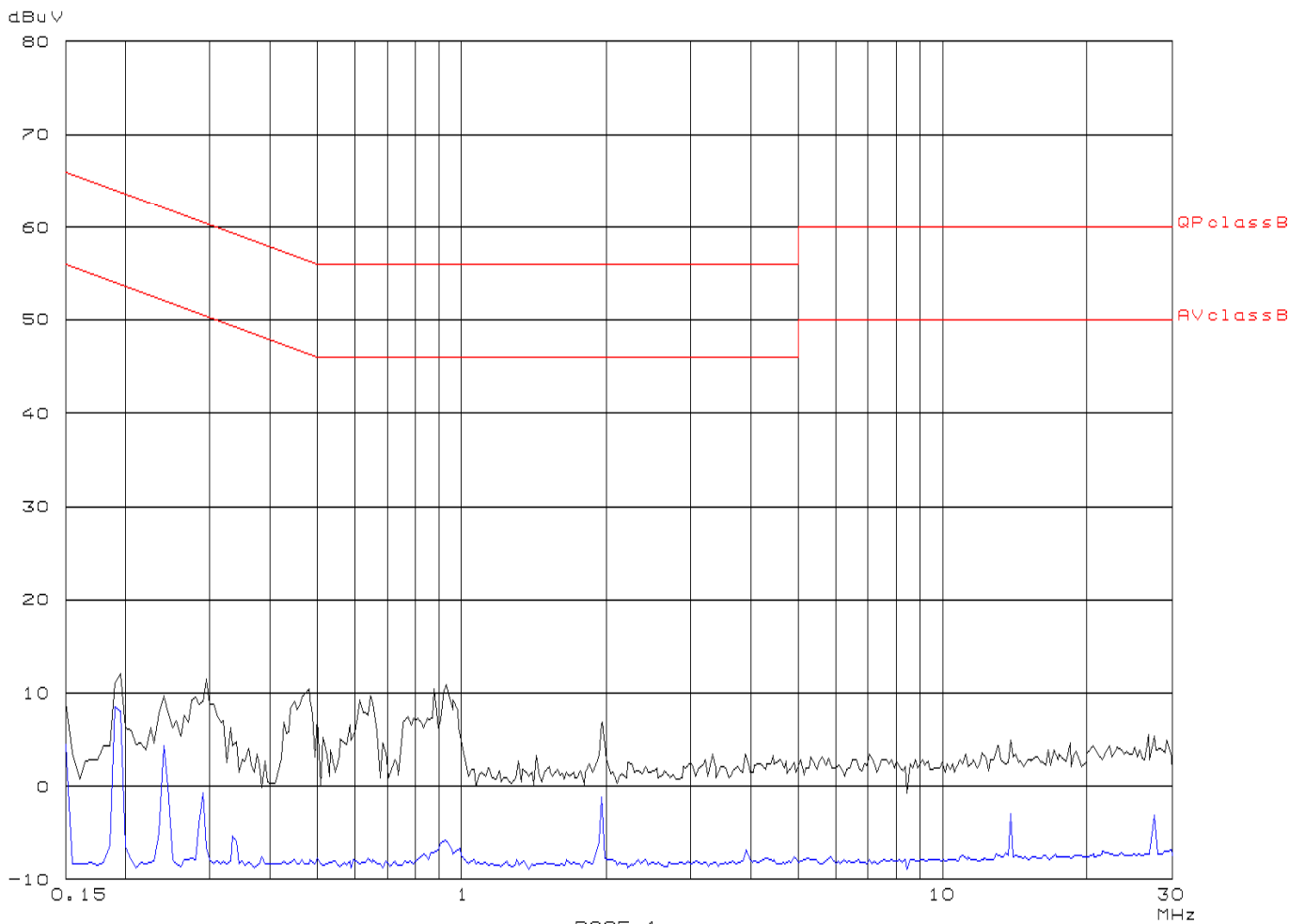
PAGE 1

Test point: Phase line
Operation mode: Operation mode 2
Remarks: \\\

Result: ■ - passed

NEMKO S.p.A. EMC Lab. CONDUCTED EMISSIONS AC MAINS

EUT: DECT79-C01
Manuf: SunoCorp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Phase line
off hook



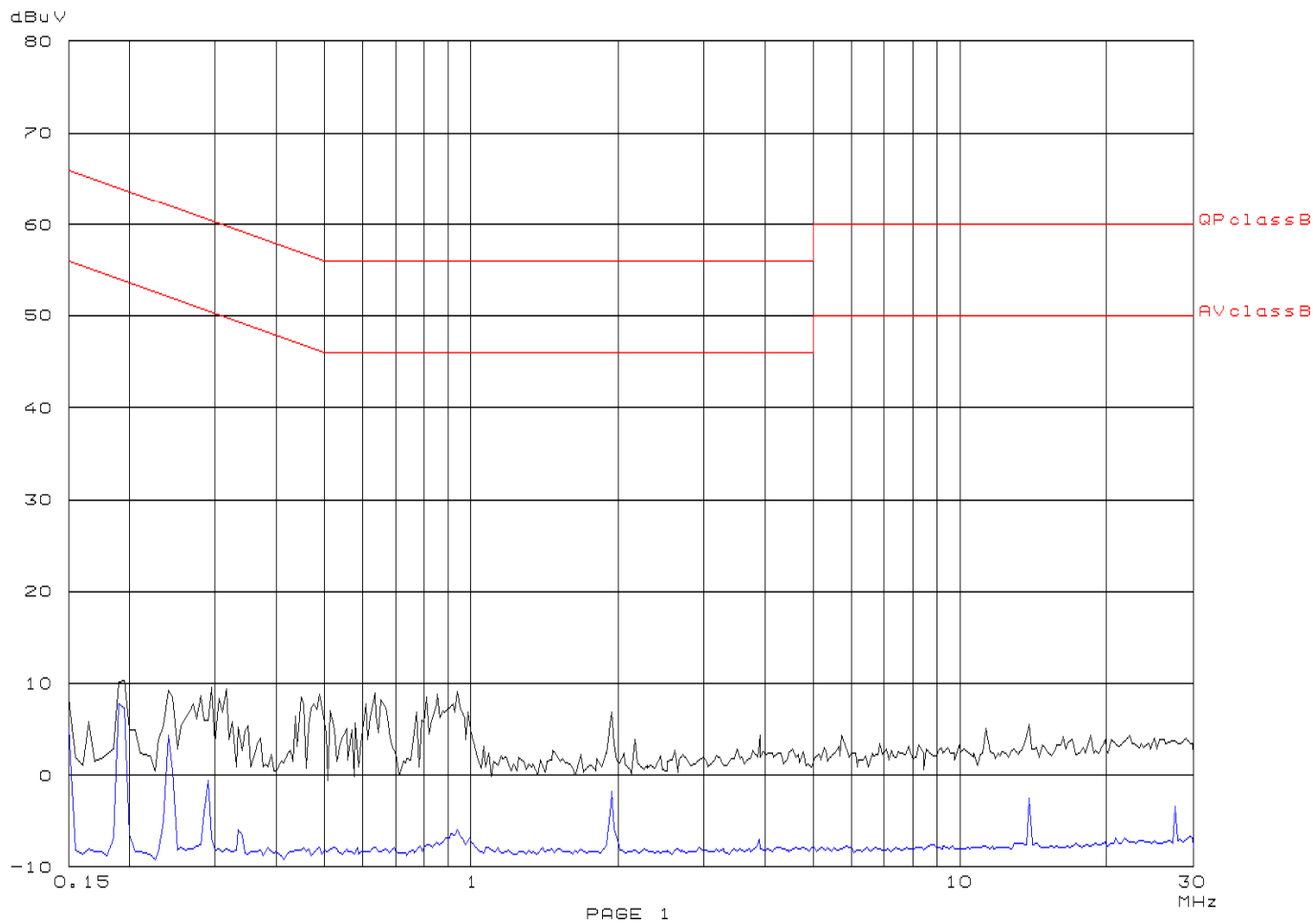
PAGE 1

Test point: Neutral line
Operation mode: Operation mode 2
Remarks: \\\

Result:■ - passed

NEMKO S.p.A. EMC Lab.
CONDUCTED EMISSIONS AC MAINS

EUT: DECT79-C01
Manuf: Suncorp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Neutral line
off hook



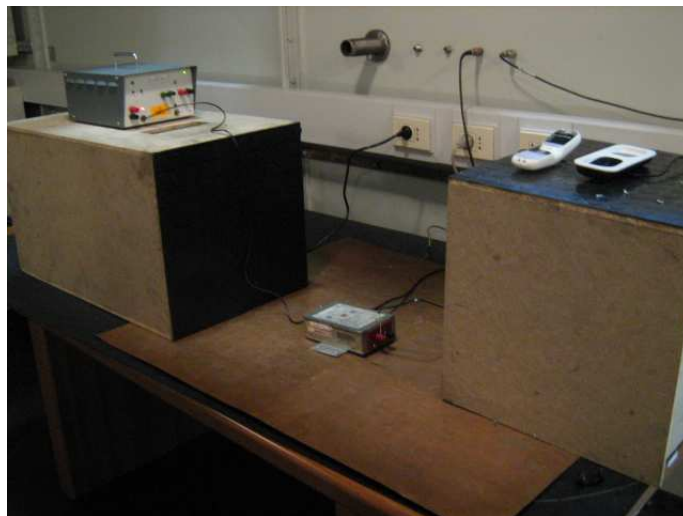
5.2 Conducted disturbance on Telecommunication port

For test instruments and accessories used see section 6.

5.2.1 Description of the test location

Test location: Shielded room

5.2.2 Photo documentation of the test set-up



5.2.3 Test result

The requirements are **Fulfilled**

Frequency range: 0.15 MHz - 30 MHz

Min. limit margin None

Remarks: The limits are kept. For detailed results, please see the following page(s).

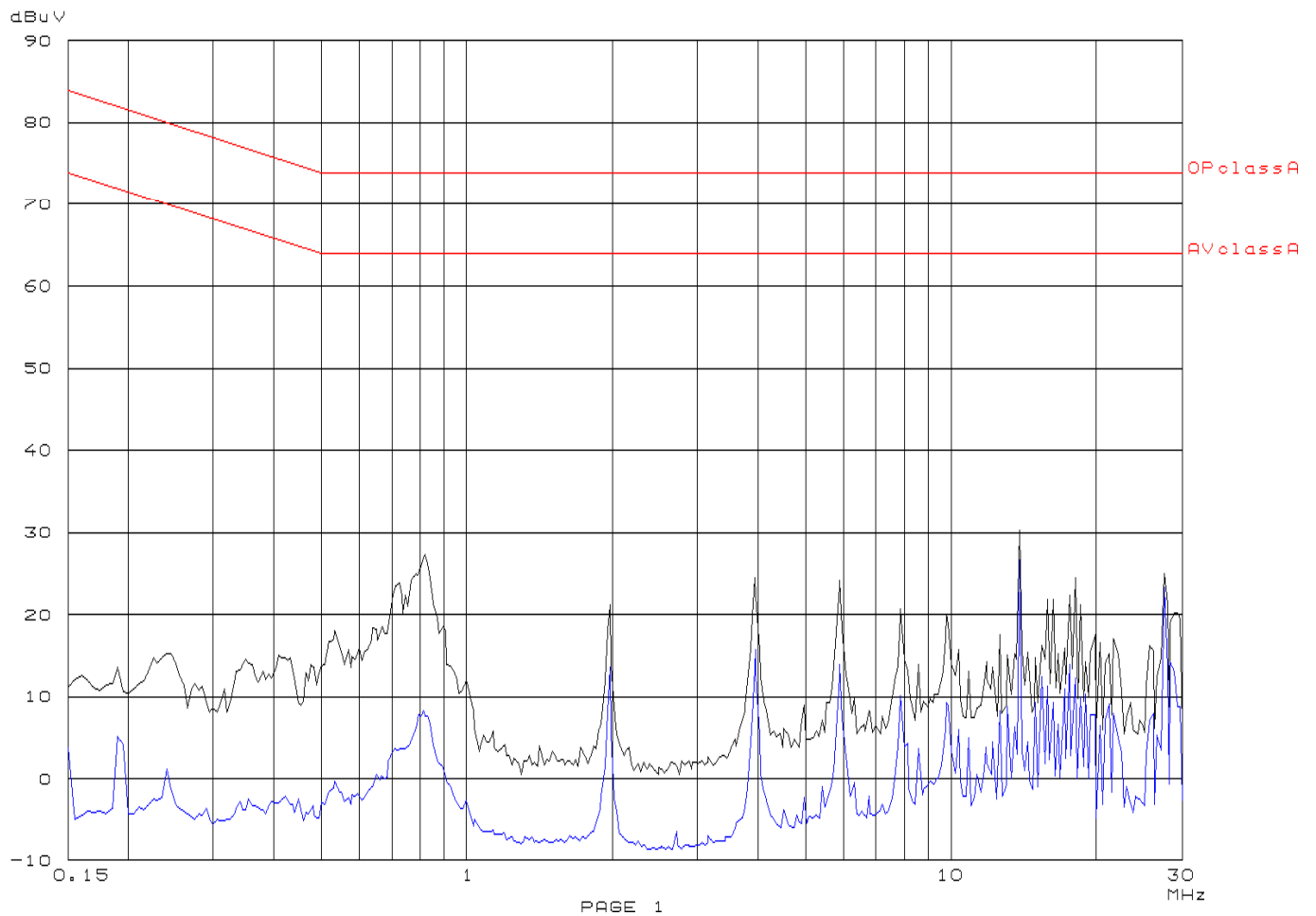
5.2.4 Test protocol

Test point: Telecommunication line
 Operation mode: Operation mode 2
 Remarks: PSTN line

Result: ■ - passed

NEMKO S.p.A. EMC Lab.
 CONDUCTED EMISSIONS TLC port

EUT: DECTP9-C01
 Manuf: Suncorp
 Op Cond: See relevant paragraph of test report
 Operator: G. Curioni
 Test Spec: EN 55022 class B
 Comment: PSTN line
 off hook



PAGE 1

5.3 Radiated disturbance (electric field)

For test instruments and accessories used see section 6.

5.3.1 Description of the test location

Test location: Semi anechoic chamber

Test distance: 10 meter

5.3.2 Photo documentation of the test set-up



5.3.3 Test result

The requirements are **Fulfilled**

Frequency range: 30 MHz - 1000 MHz

Min. limit margin: None

Remarks: The limits are kept. For detailed results, please see the following page(s).

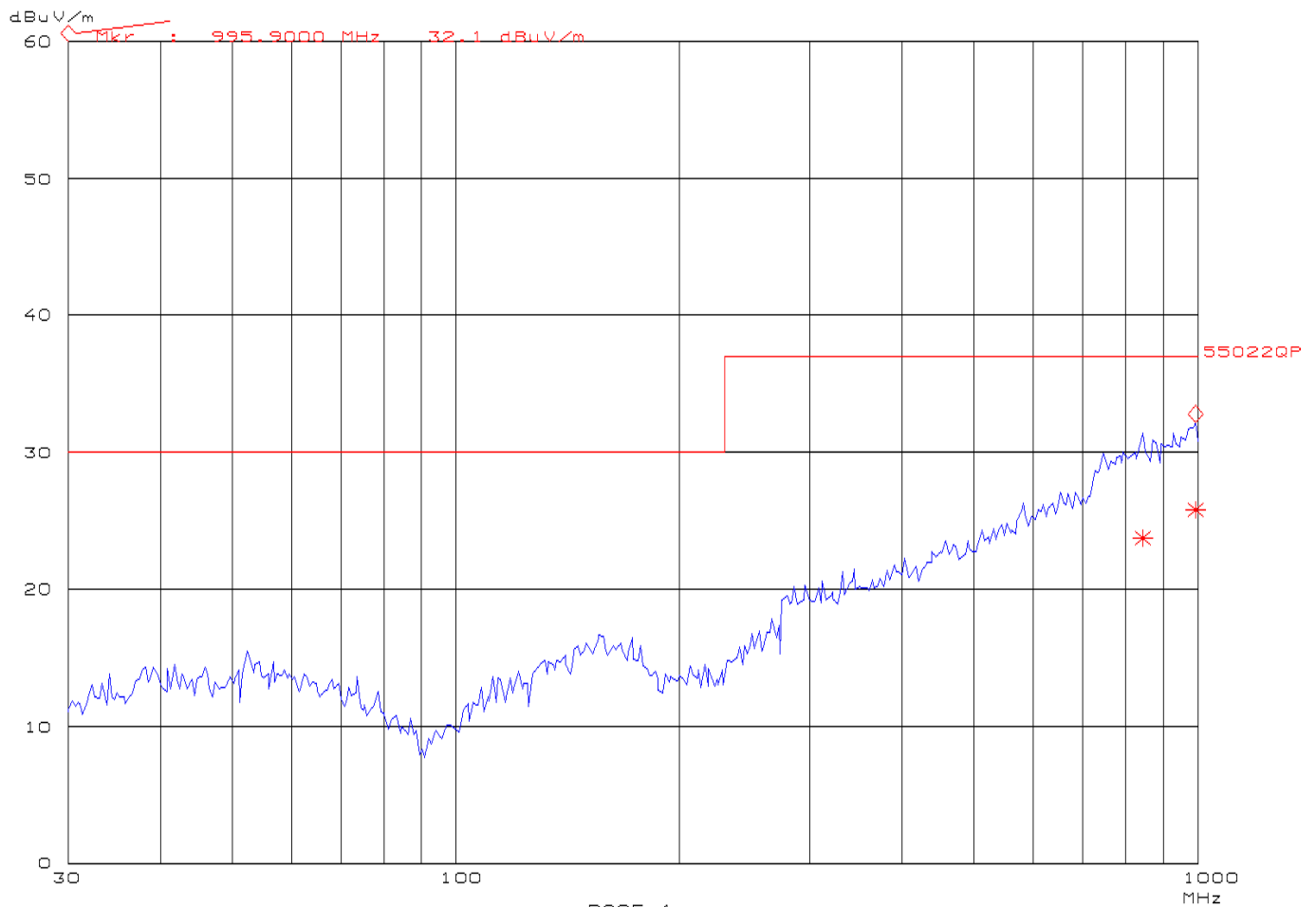
5.3.4 Test protocol

Operation mode: Operation mode 1 / Horizontal Polarization
Remarks: -

Result: ■ - passed

NEMKO S.p.A.
RADIATED EMISSIONS (E-Field)

EUT: DECT79-C01
Manuf: SunoCorp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Scan in horizontal polarization at 300 cm
Charging



NEMKO S.p.A.
RADIATED EMISSIONS (E-Field)

EUT: DECT79-C01
Manuf: Sun corp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Scan in horizontal polarization at 300 cm
Charging

Final Measurement Results:

Frequency MHz	QP Level hor. dBuV/m	QP Level vert. dBuV/m	QP Limit dBuV/m
842.00000	23.7	23.7	37.0
995.90000	25.7	25.7	37.0
* limit exceeded			

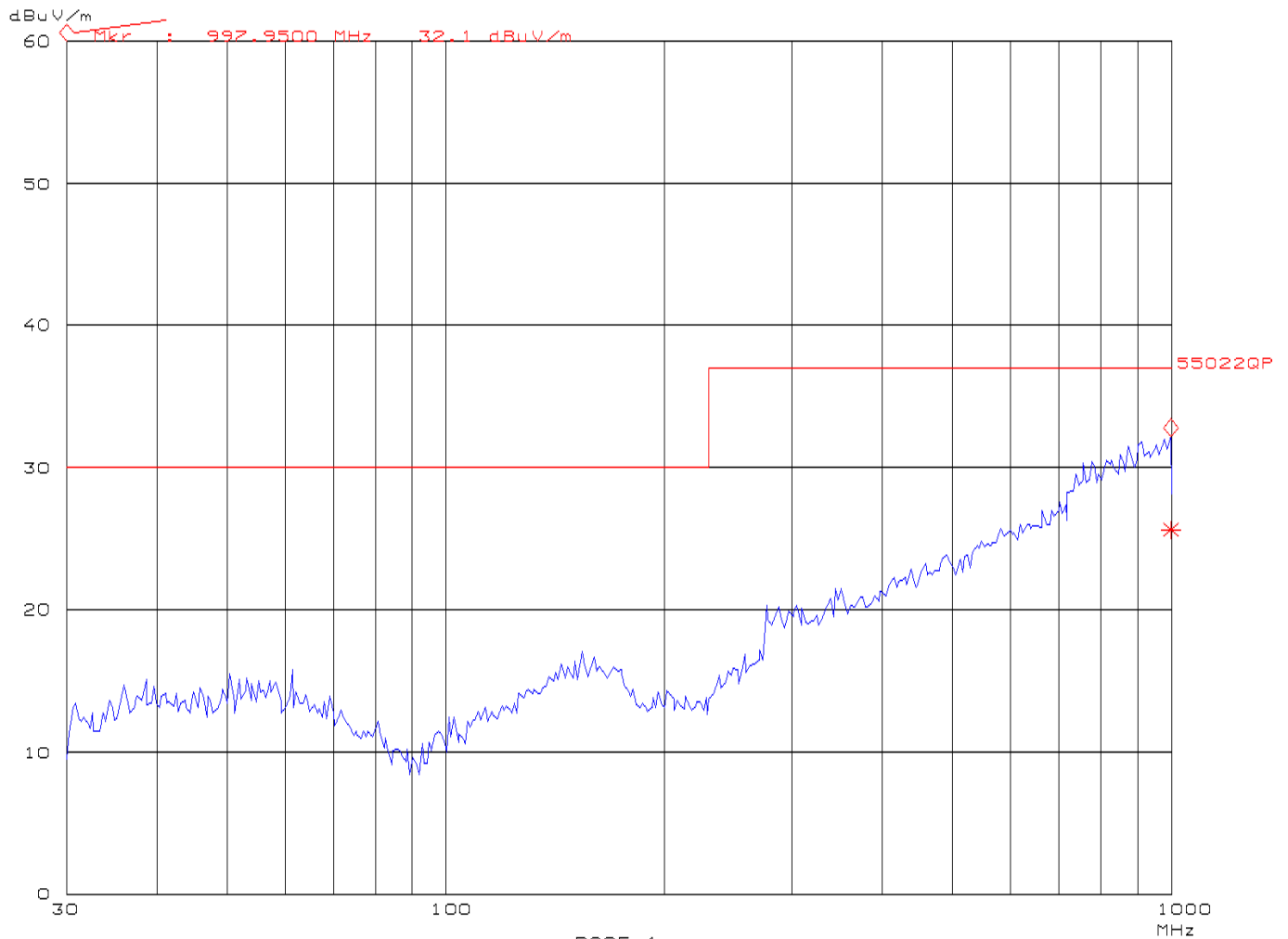
Operation mode: Operation mode 1 / Vertical Polarization
Remarks: -

Result: ■ - passed

NEMKO S.p.A.

RADIATED EMISSIONS (E-Field)

EUT: DECT79-C01
Manuf: Suncoorp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Scan in vertical polarization at 100 cm
Charging



PAGE 1

NEMKO S.p.A.
RADIATED EMISSIONS (E-Field)

EUT: DECT79-C01
Manuf: Suno corp
Op Cond: See relevant paragraph of test report
Operator: G. Curioni
Test Spec: EN 55022 class B
Comment: Scan in vertical polarization at 100 cm
Charging

Final Measurement Results:

Frequency MHz	QP Level hor. dBuV/m	QP Level vert. dBuV/m	QP Limit dBuV/m
997.95000	25.6	25.6	37.0
* limit exceeded			

5.4 Harmonic current

For test instruments and accessories used see section 6.

5.4.1 Description of the test location

Test location: Laboratory

5.4.2 Photo documentation of the test set-up



5.4.3 Test result

The requirements are **Not applicable**

Remarks: E.U.T. power consumption < 75 W.

5.5 Voltage fluctuations and flicker

For test instruments and accessories used see section 6.

5.5.1 Description of the test location

Test location: Laboratory

5.5.2 Photo documentation of the test set-up



5.5.3 Test result

The requirements are **Fulfilled**

Remarks: The limits are kept. For detailed results, please see the following page(s).

5.5.4 Test protocol

Operation mode: Operation mode 2
Remarks: //

Result: ■ - passed

Date : 05/03/2008 8.47.57 V4.16

Urms =	230.3V	Freq =	49.987	Range:	0.25 A
Irms =	0.020A	Ipk =	0.040A	cf =	1.988
P =	2.362W	S =	4.639VA	pf =	0.509

Test - Time : 1 x 10min = 10min (100 %)

LIN (Line Impedance Network) : L: 0.24ohm +j0.15ohm N: 0.16ohm +j0.10ohm

Limits :	Plt :	0.65	Pst :	1.00
	dmax :	4.00 %	dc :	3.30 %
	dtLim:	3.30 %	dt>Lim:	500ms

Test completed, Result: PASSED

	Pst	dmax	dc	dt>Lim
	[%]	[%]	[%]	[ms]
1	0.072	0.000	0.000	0.000

5.6 Electrostatic discharge

For test instruments and accessories used see section 6.

5.6.1 Description of the test location

Test location: Laboratory

5.6.2 Photo documentation of the test set-up



Legend

C: Contact discharge

A: Air discharge

5.6.3 Test specification:Contact discharge voltage:

■ 4 kV

Air discharge voltage:

■ 8 kV

Discharge impedance:■ 330 Ω / 150 pFDischarge factor:■ ≥ 1 sec.Number of discharges:■ ≥ 10 Type of discharge:

Direct discharge

■ Air discharge

■ Contact discharge

Indirect discharge

■ Contact discharge

Polarity:

■ Positive

■ Negative

Discharge location:■ Horizontal coupling plate (HCP) (C)■ Vertical coupling plate (VCP) (C)■ Paging (A)■ PSTN Connector (A)■ DC power supply connector (A)■ Enclosure (A)■ Battery Compartment (A)■ Keyboard (A)■ Display (A)■ Microphone and Speaker (A)■ Screws (C)■ Handset and base recharging contact (A)**5.6.4 Test result**The requirements are **Fulfilled**Performance Criterion **TR, TT****Remarks:** During the test no deviation was detected to the selected operation mode(s).

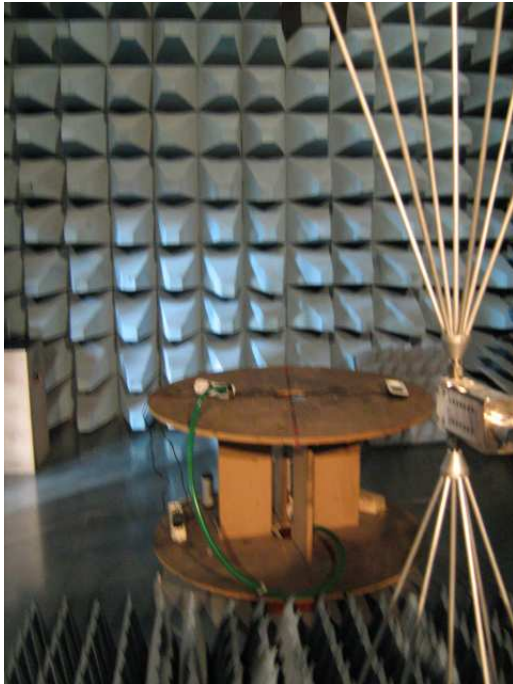
5.7 Radiated, radio-frequency, electromagnetic field

For test instruments and accessories used see section 6.

5.7.1 Description of the test location

Test location: Anechoic chamber

5.7.2 Photo documentation of the test set-up



5.7.3 Test specification:Frequency range:

- 80 MHz to 2000 MHz

Field strength:

- 3 V/m

EuT - antenna separation:

- 2 m

Modulation:

- AM: 80 %
- sinusoidal 1000 Hz

Frequency step:

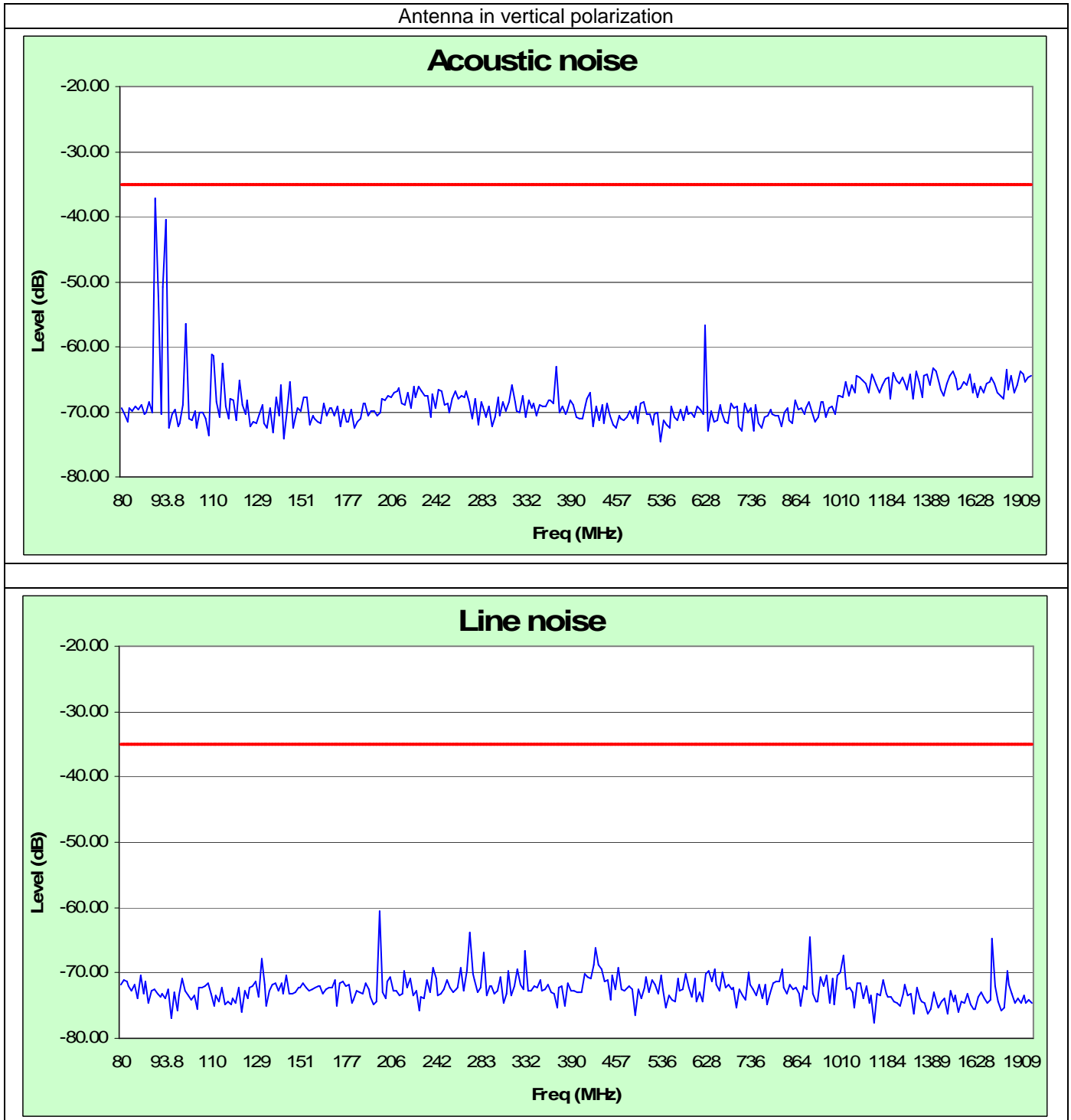
- 1 % with 3 s dwell time

Antenna polarisation:

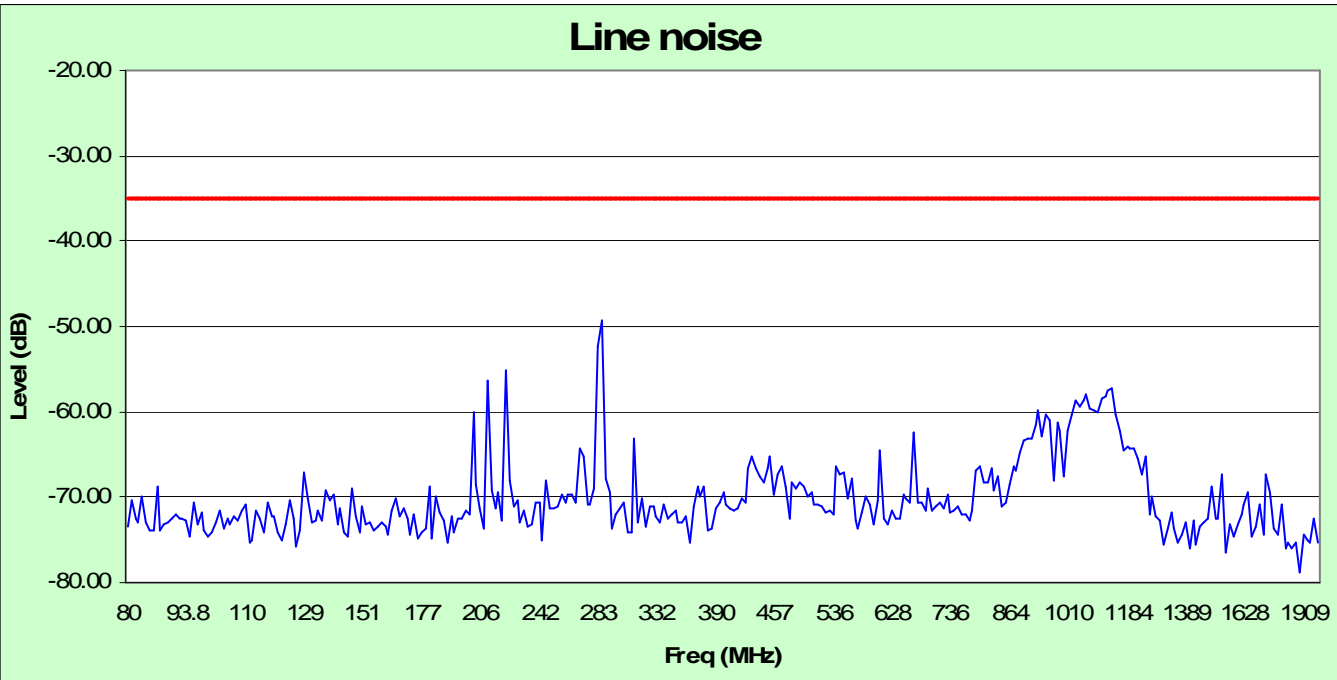
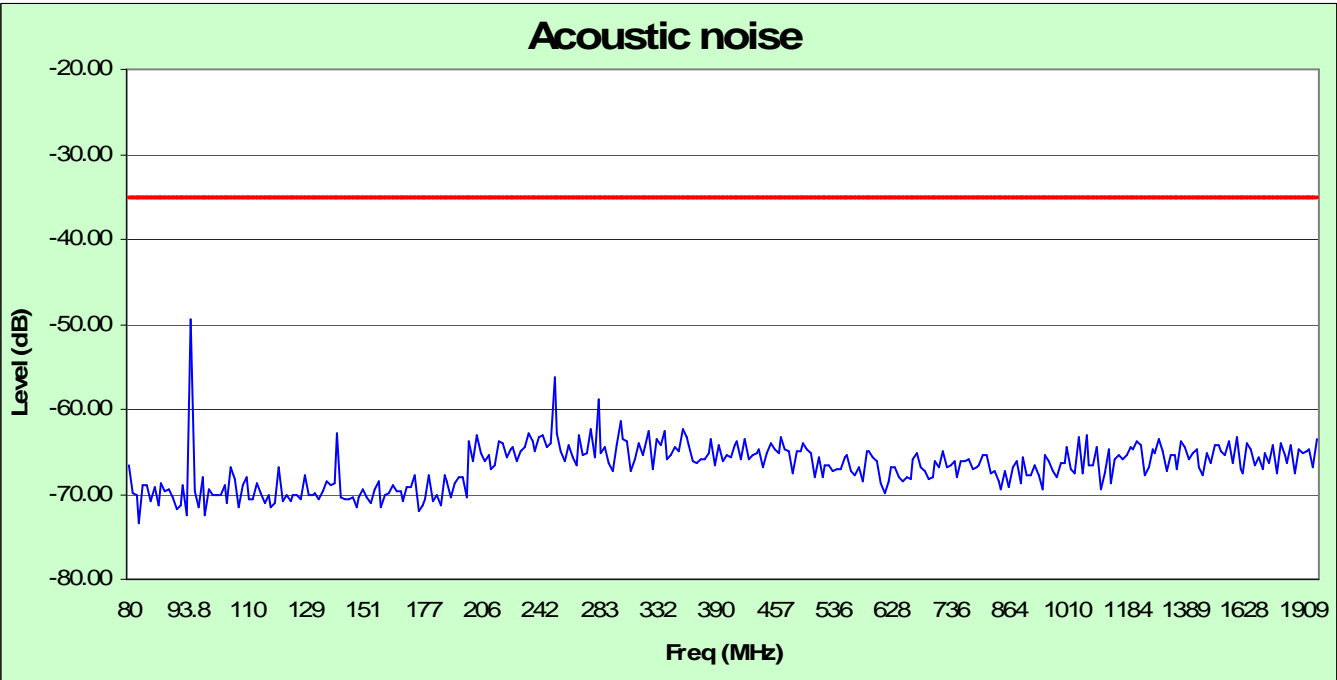
- horizontal
- vertical

5.7.4 Test resultThe requirements are **Fulfilled**Performance Criterion **CR, CT****Remarks:**The limits are kept. For detailed results, please see the following page(s).

5.7.5 Test protocol



Antenna in horizontal polarization



5.8 Electrical fast transients / Burst

For test instruments and accessories used see section 6.

5.8.1 Description of the test location

Test location: Laboratory

5.8.2 Photo documentation of the test set-up



5.8.3 Test specification:

Coupling network:

■ 1 kV (AC mains supply)

Coupling clamp:

■ 0.5 kV (Telecommunication network)

Burst frequency:

■ 5.0 kHz

Coupling duration:

■ ≥ 60 s

Polarity:

■ positive

■ negative

5.8.4 Coupling points

Cable description:	<u>AC mains port</u>	
Screening:	<input type="radio"/> screened	<input checked="" type="checkbox"/> unscreened
	<input type="radio"/> passive	<input type="radio"/> active
	<input type="radio"/> analogue	<input type="radio"/> digital
Status:		
Signal transmission:		
Length:	<input checked="" type="checkbox"/> Direct plug-in	
Cable description:	<u>Telecommunication port</u>	
Screening:	<input type="radio"/> screened	<input checked="" type="checkbox"/> unscreened
	<input type="radio"/> passive	<input type="radio"/> active
	<input type="radio"/> analogue	<input type="radio"/> digital
Status:		
Signal transmission:		
Length:	<input checked="" type="checkbox"/> 2 m	

5.8.5 Test result

The requirements are **Fulfilled**

Performance Criterion **TR, TT**

Remarks: During the test no deviation was detected to the selected operation mode(s).

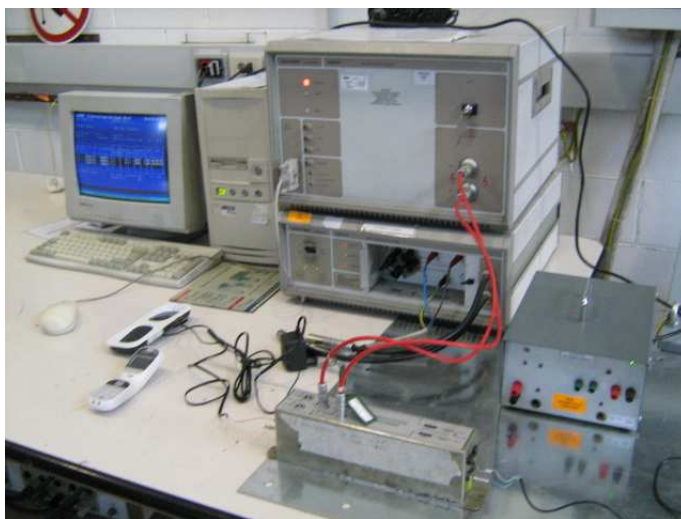
5.9 Surge

For test instruments and accessories used see section 6.

5.9.1 Description of the test location

Test location: Laboratory

5.9.2 Photo documentation of the test set-up



5.9.3 Test specification for AC mains:

Pulse amplitude-Power line sym.:
Source impedance: $2 \Omega + 18 \mu\text{F}$

■ 1 kV

Pulse amplitude-Power line unsym.:
Source impedance: $12 \Omega + 9 \mu\text{F}$

■ 2 kV

Number of surges:

■ 5 Surges/Phase angle

Phase angle:

■ 0° ■ 90° o 180° ■ 270°

Repetition rate:

■ 60 s

Polarity:

■ positive ■ negative

5.9.4 Test specification for Telecommunication port:

<u>Pulse amplitude-Power line unsym:</u>	■ 1 kV	
Source impedance: 42 Ω + 0.5 μ F		
<u>Number of surges:</u>	■ 5 Surges / polarity	
<u>Repetition rate:</u>	■ 60 s	
<u>Polarity:</u>	■ positive	■ negative

5.9.5 Coupling points

Cable description:	<u>AC mains port</u>	
Screening:	o screened	■ unscreened
	o passive	o active
	o analogue	o digital
Status:		
Signal transmission:		
Length:	■ Direct plug-in	
Cable description:	<u>Telecommunication port</u>	
Screening:	o screened	■ unscreened
	o passive	o active
	o analogue	o digital
Status:		
Signal transmission:		
Length:	■ 2 m	

5.9.6 Test result

The requirements are **Fulfilled**

Performance Criterion **TR, TT**

Remarks:	<u>During the test no deviation was detected to the selected operation mode(s).</u>

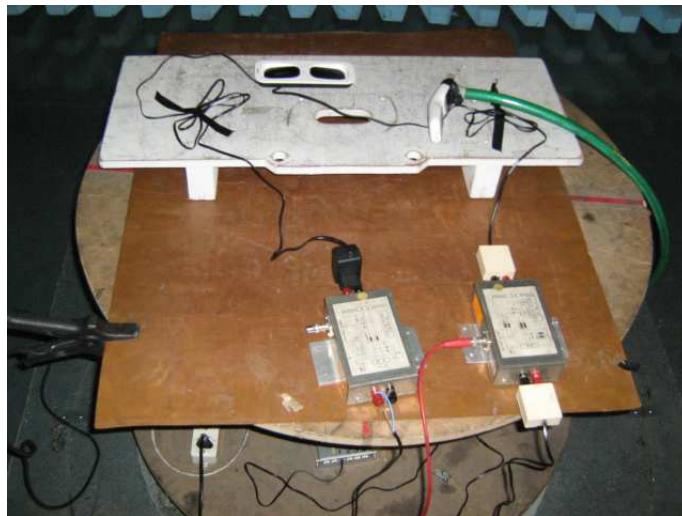
5.10 Conducted disturbances induced by radio-frequency fields

For test instruments and accessories used see section 6.

5.10.1 Description of the test location

Test location: Laboratory

5.10.2 Photo documentation of the test set-up



5.10.3 Test specification:

<u>Frequency range:</u>	■ 0.15 MHz to 80 MHz
<u>Test voltage:</u>	■ 3 V
<u>Modulation:</u>	■ AM: 80 % ■ sinusoidal 1000Hz
<u>Frequency step:</u>	■ 1 % with 3 s dwell time

5.10.4 Coupling points

Cable description (Port1): AC mains port

Screening: ☐ screened ☒ unscreened
☐ passive ☐ active
☐ analogue ☐ digital

Status:

Signal transmission:

Length: ☒ Direct plug-in

Cable description (Port2): Telecommunication port

Screening: ☐ screened ☒ unscreened
☐ passive ☐ active
☐ analogue ☐ digital

Status:

Signal transmission:

Length: ☒ 2 m

The following CDN's were connected during the test at the ports:

Tested	Number of CDN at port (Refer to O.-No. According to Used Test Equipment)					
	1	2	3	4	5	6
Port						
1	M2					
2		T2				

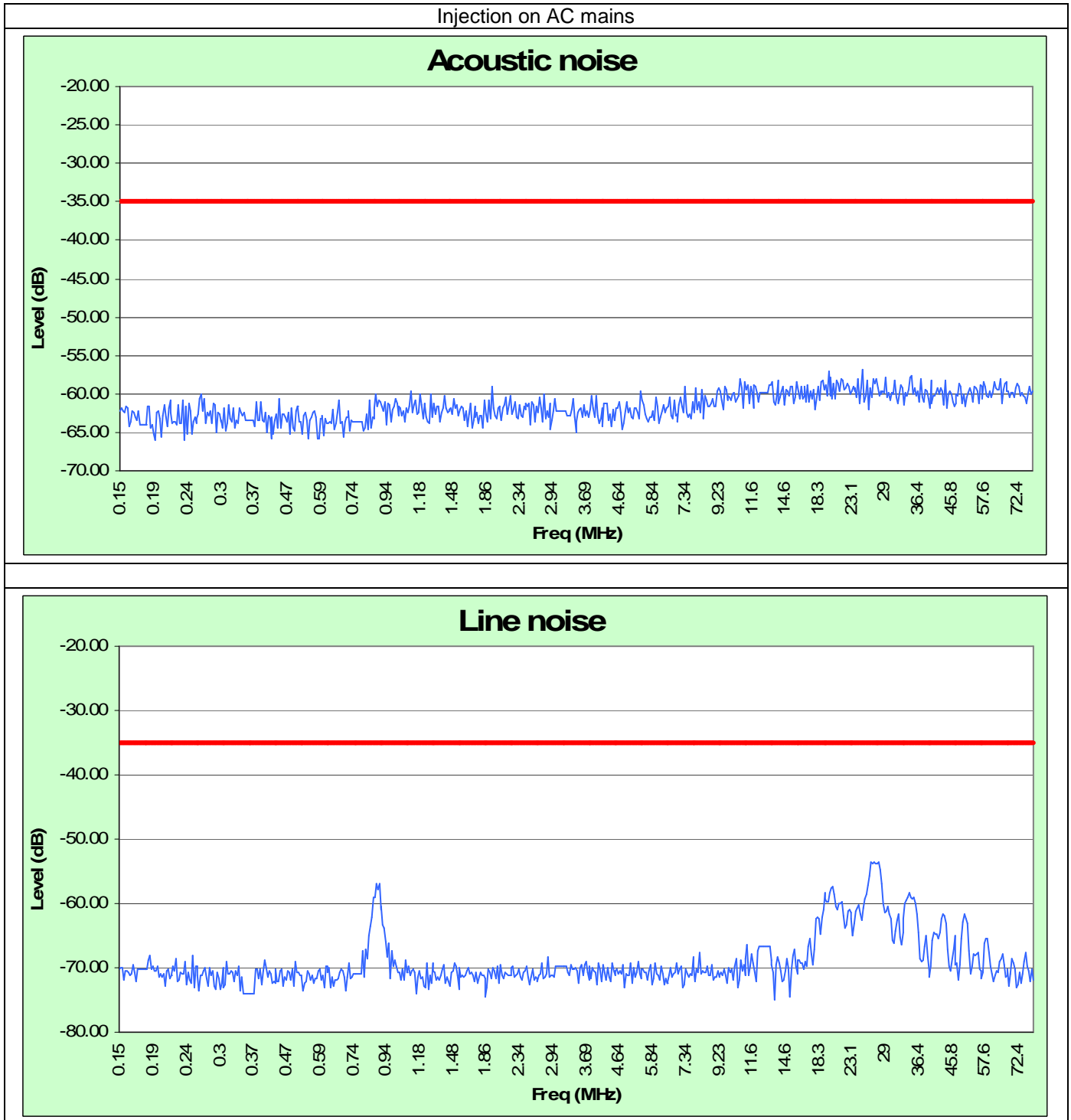
5.10.5 Test result

The requirements are **Fulfilled**

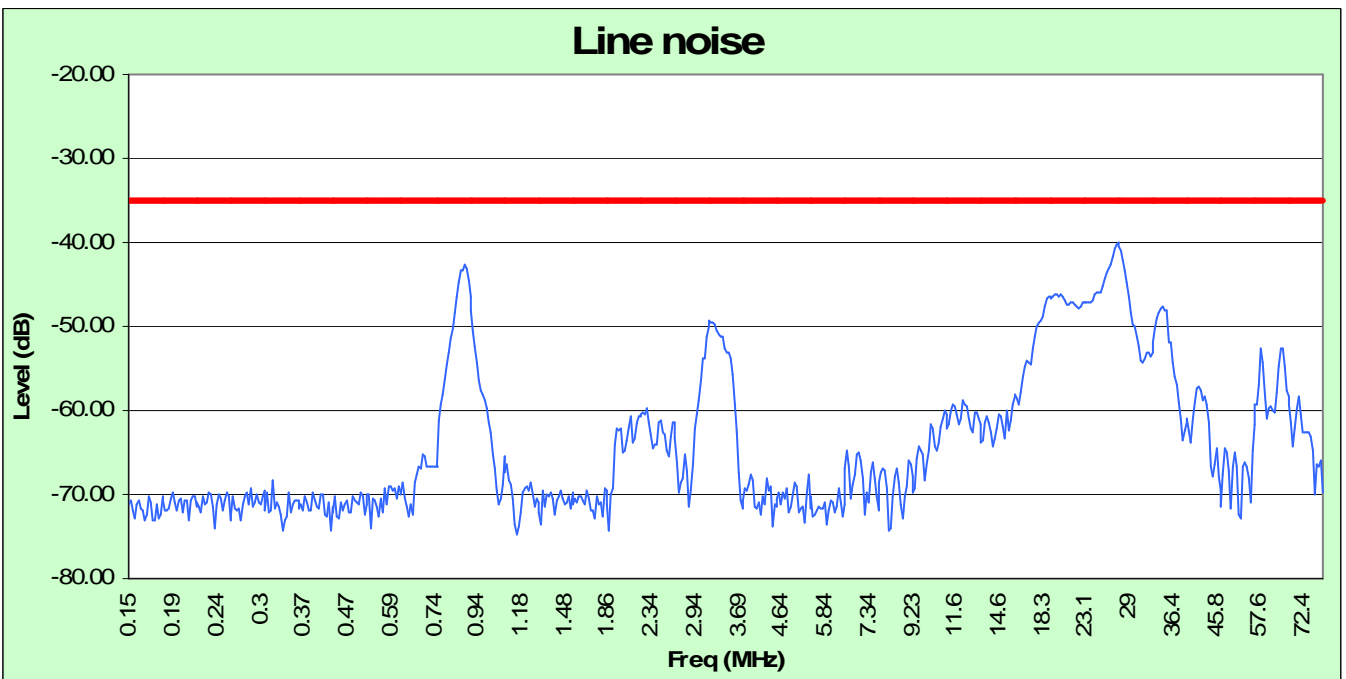
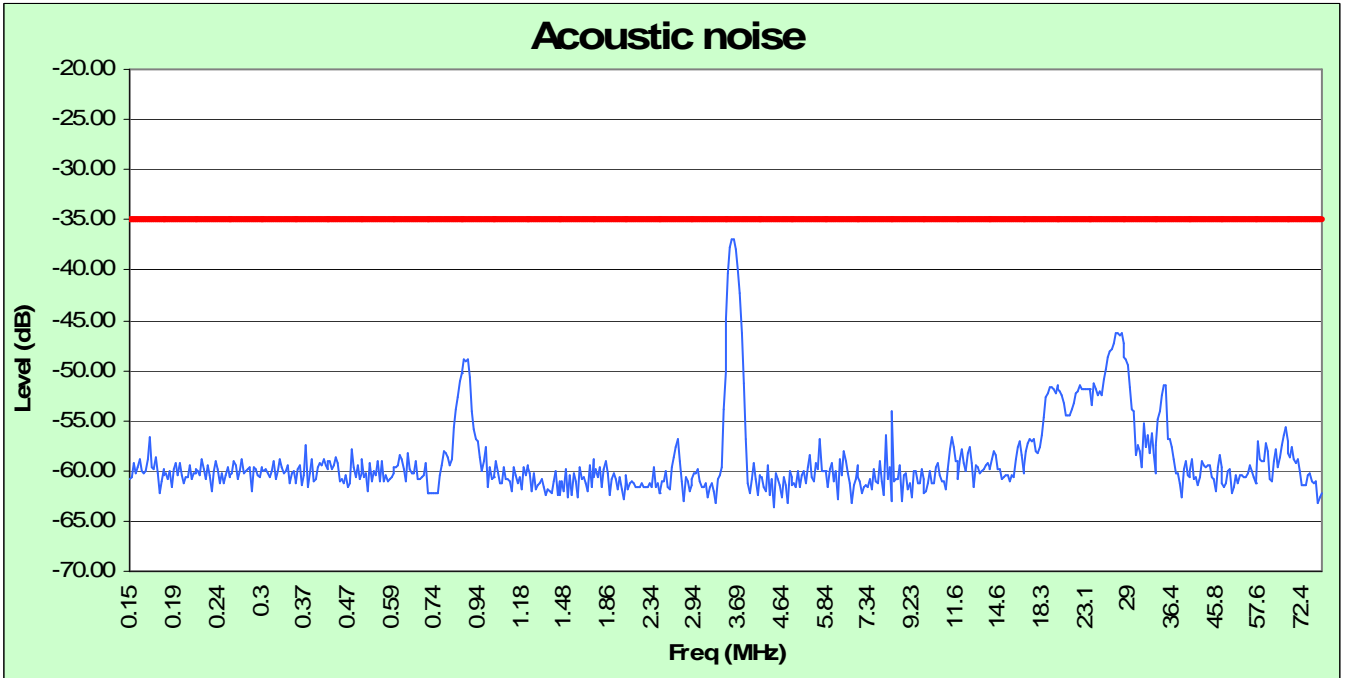
Performance Criterion **CR, CT**

Remarks: The limits are kept. For detailed results, please see the following page(s).

5.10.6 Test protocol



Injection on PSTN line



5.11 Voltage dips

For test instruments and accessories used see section 6.

5.11.1 Description of the test location

Test location: Laboratory

5.11.2 Photo documentation of the test set-up



5.11.3 Test specification:

Nominal Mains Voltage (V_N):

- 230 Vac

Number of voltage fluctuations:

- 3

Level of reduction(dip) / duration:

- 30 % / 10ms
- 60 % / 100ms

5.11.4 Test result

The requirements are **Fulfilled**

Performance Criterion **CR, CT, TR, TT**

Remarks: During the dips 60 % / 100ms, the line drops.

5.12 Short interruptions

For test instruments and accessories used see section 6.

5.12.1 Description of the test location

Test location: Laboratory

5.12.2 Photo documentation of the test set-up



5.12.3 Test specification:

Nominal Mains Voltage (V_N):

■ 230 Vac

Number of Interruptions:

■ 3

Duration of the Interruption:

■ 5000 ms

5.12.4 Test resultThe requirements are **Fulfilled**Performance Criterion **TR, TT****Remarks:**

During the test the line drops.

6 USED TEST EQUIPMENT

<i>Equipment</i>	<i>Model</i>	<i>Manufacturer</i>	<i>Serial N°</i>
Bilog antenna 30 ÷ 1500 MHz	VULB 9168	Schwarzbeck	VULB 9168-242
Analyzer RF unit	ESBI-RF	R&S	828038/003
Analyzer display unit	ESAI-D	R&S	829808/005
RF receiver 20 ÷ 1000 MHz	ESVS 30	R&S	829 007/007
Turn-table	HCT	R&S	835 803/03
Antenna mast	HCM	R&S	836 529/05
Controller	HCC	R&S	836 620/7
Semi-anechoic chamber	10m semi-anechoic chamber	Nemko	530
Shielded room	10m control room	Siemens	1947
RF receiver 9 kHz ÷ 30 MHz	ESHS 30	R&S	828765/012
LISN 9 kHz ÷ 30 MHz	ESH2-Z5	R&S	872 460/041
Shielded room	Conducted emission test room	Siemens	1862
Mains analyzer	Harmonics 1000	EMC Partner	016
Log periodic antenna 200 ÷ 1000 MHz	HUF-Z3	R&S	893 232/005
Biconical antenna 20 ÷ 300 MHz	VHBC 9133	Schwarzbeck	9133-074
Microwave Horn antenna 0.8 ÷ 4.2 GHz	AT4002A	Amplifier Research	300773
RF amplifier 80 ÷ 1000 MHz	SMC100	IFI	1754-0696
Power supply control module	PS5000	IFI	-
RF amplifier 0.8 ÷ 4.2 GHz	50S1G4A	Amplifier Research	301049
Power meter	NRVD	R&S	833697/027
Thermal power sensor	NRV-Z55	R&S	100300
Bidirectional Coaxial coupler	3020A	NARDA Microline	90101
Coaxial coupler	DC7144	Amplifier Research	301249
Semi-anechoic chamber	3m semi-anechoic chamber	Nemko	70
Shielded room	3m control room	Siemens	3
Audio Analyzer 10 Hz – 100KHz	UPA	R&S	881 456/051
Audio Analyzer 10 Hz – 100KHz	UPA	R&S	881 020/005
Microphone	4165	Bruel & Kjaer	1120379
Microphone power supply	2807	Bruel & Kjaer	888535
PSTN feeding bridge	TEL1H22U	Nemko	144
ESD Test system	ESD3000	EMC Partner	252
Mainframe	NSG 200C	Schaffner	00861
Burst generator	NSG 225A	Schaffner	1484 9222
Coupling clamp	CDN 125	Schaffner	245
Coupling/decoupling network	CDN 801-M2	Rohrbacher	60118
Coupling/decoupling network	CDN 801-T2	Rohrbacher	60114
RF Conducted immunity test equipment	CWS500 CSI	EM Test	V0710102305
Attenuator 6dB	ATT6/75	EM Test	0206-18
Shielded room	Conducted immunity test room	Siemens	68
AC power source	6834	HP	3432A-00125
Pulse generator	NSG 651	Schaffner	172

<i>Equipment</i>	<i>Model</i>	<i>Manufacturer</i>	<i>Serial N°</i>
Coupling network	CDN 110	Schaffner	255 9401
Coupling network	CDN 116	Schaffner	149 9318
Thermohygrometer data loggers	175-H2	TESTO	20012380/305

7 PHOTOS

